Acano solution 1.7

Customization Guidelines

June 2015

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1 Introduction

This document covers the customized features in the Acano solution release 1.6. These features allow modification of the voice prompts, background images and logos.

It follows on from the appropriate Deployment Guide (see the figure below).

In addition to this guide, the material shown in the figure below can be found at the Acano Documentation & software page. If you need any technical assistance with the configuration, or you want to report a suspected bug, email support@acano.com.

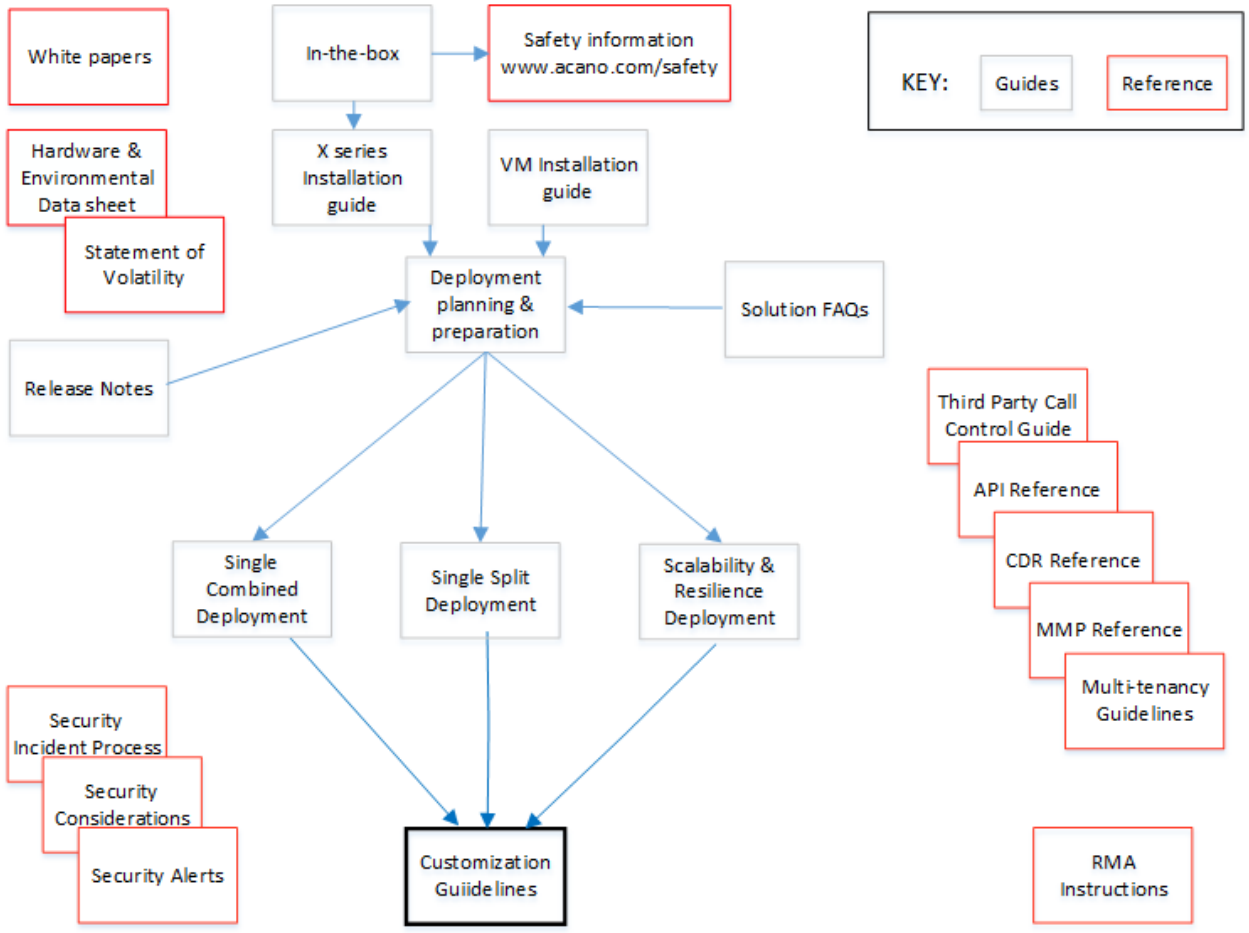


Figure 1: Installation and deployment documentation

1.1 License Keys

Customization is controlled by license keys with different keys providing different levels of customization. To purchase keys, contact your Acano partner.

The levels of customization supported are:

- **No key**: control of the background image and logo on the WebRTC landing page of a single Web Bridge via the Web Admin Interface; no API configuration is allowed

- **Single brand** via API: only a single set of resources can be specified. These resources are used for all coSpaces, IVRs and Web Bridges
- **Multiple brand** via API: different resources can be used for different coSpaces, IVRs and Web Bridges. These resources can be assigned at the system, tenant or coSpace/IVR level
- **White-label** via API

CAUTION: In this release some earlier methods of deploying branding have been removed and this document specifies how to perform branding in the R1.6 release.

1.2 Web Server Requirements

All the customizations described in this document require a directory on a web server on which .wav, jpg, png or archive files can be stored. This must be reachable by the Acano Call Bridge. The web server must not require the Call Bridge to perform any form of HTTP authentication.

The import occurs when the Call Bridge first needs to use the customized files.

Note: If you require more than one customization; for example one per tenant, currently you require a separate Web Bridge for each one. This can be a standalone Web Bridge on a VM server.

2 WebRTC Client Customization

From the R1.6 release of the Acano solution, the recommended procedure for customization of the WebRTC client is via the API. This provides additional features and flexibility compared to using the Web Admin Interface—without a branding license you can only control the background image and logo on the WebRTC landing page of a single Web Bridge and this must be done via the Web Admin Interface.

Using the API allows customization of the default Acano WebRTC login background image, the Acano logo and the colors used for the login dialog. It also allows customization of the logo displayed when no video is being received.

The files are stored within an archive file. The location of this resourceArchive is set via the API (a POST method to the "/webBridges" node or a PUT to a "/webBridges/<web bridge id>").

The Call Bridge retrieves the archive and pushes it to the Web Bridge to be served. In the event of a failure (for example, if the configured URI can't be reached) an alarm is displayed in the Web Admin Interface and on the API "/system/alarms" node, but users can still log in using the WebRTC Client.

2.1 File Properties and Names

The following files must be placed together in a zip archive file. The total zipped file size must be less than 1MB. This archive file is then unpacked by the Web Bridge and used to create the WebRTC Client pages.

Use	Filename to use
Sign in page background image	sign_in_background.jpg
Sign in page logo	sign_in_logo.png
Sign in page colors	sign_in_settings.json
In-call logo	call_lobby_logo.png (only available in Server R1.6.x, removed from R1.7.x)

2.1.1 Sign-in page background image and logo

The background image must be in .jpg format and the logo file must be in .png format. Transparency in .png files is supported, and recommended, for the logo.

Maximum size for the background image is 1920 pixels wide and 1200 pixels high, and less than 500kB in size. It will be scaled isotropically and then cropped at either the right or bottom to fit the browser window.

The recommended resolution for the logo image is 282 pixels wide by 68 pixels high; these dimensions fill the space to the edges of the Sign in box horizontally and use the top half of the space between the 'Join call / Sign in' and the Call id box. This file must be less than 250kB in size.

2.1.2 Join call pane colors

The colors used for the Join call pane are controlled by the use of a .json file. Up to four colors can be specified using the HTML hexadecimal format. If any are missing, then default colors are used.

Color	Description	Default
panelTopColor	Color used at top of panel.	#DC2D0F
panelBottomColor	Color used at bottom of panel.	#B41E00
panelForegroundTextColor	Colour used for text shown on panel.	#FFFFFF
panelErrorTextColor	Colour used for error text shown on panel.	#FFD200
panelHyperlinkTextColor	Colour of link at bottom of panel, shown when user tries to join a call with an incompatible browser and they're prompted to use the desktop client.	#FFFF00
footerColor	Background colour used for footer on sign in page, if displayed.	#49555F
footerTextColor	Colour used for text in footer.	#FFFFFF

```
{
 "panelTopColor" : "#FFFF00",
 "panelBottomColor" : "#FF0000",
 "panelForegroundTextColor" : "#3333FF",
 "panelErrorTextColor" : "#00FF00",
 "panelHyperlinkTextColor" : "#CCFFFF"
 "footerColor" : "#FFFFFF",
 "footerTextColor" : "#000000"
}
```

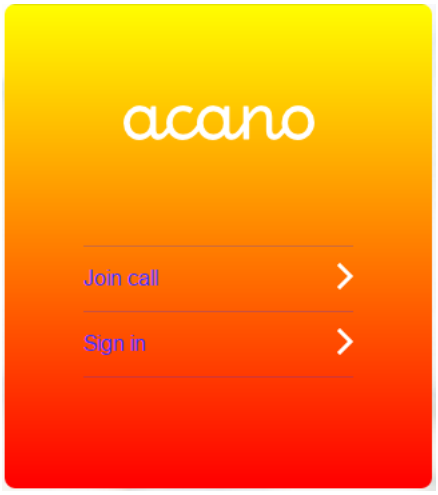


Figure 2 Example contents of sign_in_settings.json and resultant Sign-in dialog

Note: The sign_in_settings.json file must use straight quotes. If your system uses smart quotes by default, be sure to change the setting.

2.1.3 In-call logo (available in R1.6)

The In-call logo is only available in Server R1.6.x. It has been removed from R1.7.x.

You see the in-call logo displayed as part of the background when no video stream is being sent to you. This image must be in .png format, and is scaled to 132 pixels wide and 132 pixels high.

This file must be less than 250kB in size.

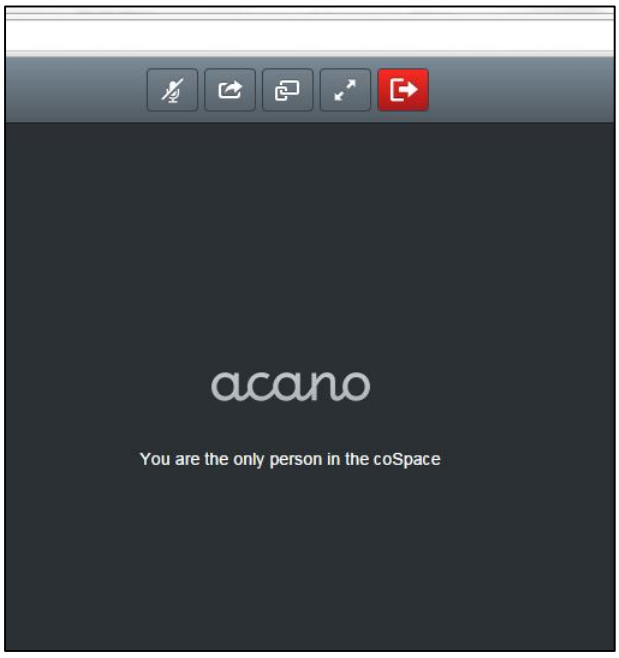


Figure 3 The default in-call logo

2.2 Customization Procedure

Note: In previous releases, the customization instructions used the Web Admin Interface but from R1.6 we recommend that you **only** use the API to customize the WebRTC landing page. See the API Specification document for details.

The following steps provide an overview of the customization procedure, for a detailed procedure refer to chapter 4.

1. Create a zip archive file containing all the files listed in the section above.
2. On the web server create a directory for the customization files and place the zip file in it.
3. Using the API, create a Web Bridge node which defines the path to the zip file above as the resourceArchive. (See the API Reference for details.)

   Note: If you specify a port value in the path, this will be used in place of the default port values of :80 for http and :443 for https. If you do not specify a port value then the default value will be used. If you specify a port value make sure that the web server used in step 2 is listening on this port.

3 Call Customization

There are two types of call customization:

- Messages heard and image seen when dialing into an IVR
- Messages heard and images seen when dialing directly into a coSpace as a SIP (including Lync) call

3.1 IVR Message Customization

From R1.6 the messages heard when calling an IVR can be customized via the API by using the ivrBrandingProfile. This profile replaces the Custom In-call Resources Location field in the Web Admin Interface **Configuration > General** page. This profile can be applied at the system level, on a per-tenant basis or for individual IVRs.

3.1.1 IVR Messages to be customized

The following list is all the IVR messages required for Release 1.6 and the associated filenames to use for the recordings.

Text of message	Filename to use
Please enter the call ID, followed by the '#'(pound) key.	ivr_id_entry.wav
I don't recognize that call ID. Please try again.	ivr_id_incorrect_try_again.wav
Please try again: this is your last attempt.	ivr_id_incorrect_final_attempt.wav
I don't recognize that call ID. Goodbye.	ivr_id_incorrect_goodbye.wav
Welcome to Acano.	ivr_welcome.wav
I haven't been able to connect you. Goodbye.	ivr_timeout.wav

3.1.2 Recording format for IVR messages

Use audio files created with Audacity and saved as a single track PCM16, at either 8 or 16kHz sample rate, 16 bits per sample and mono. The file size for each recording must be less than 400kB.

Note1: We have not tested other audio tools and, if used, they may cause problems.

Note2: It is not necessary to include any additional periods of silence at the start or end of these prompts.

3.1.3 IVR background image properties

The background image file must be .jpg format, less than 500kB in size and a maximum of 1920 pixels wide by 1200 pixels. Images will be centered, scaled and padded to preserve their aspect ratio. Progressive JPEG is not supported.

Image use	Filename to use
IVR background image	ivr_background.jpg

3.1.4 Customization procedure

The following steps provide an overview of the customization procedure, for a detailed procedure refer to chapter 4.

1. On the web server create a directory for the IVR customization files and place the files listed in the sections above in it. Do not zip these files.

   This directory must contain all the files for customization, currently the wav files listed above for IVR customization and a background image that calls made from SIP endpoints will display instead of the Acano logo at the start of the call.

   Acano have created an archive with their audio and video files. These can be individually used when a mix of custom and default files are required. The necessary files must be copied into the directory.

   If any files are missing then no alternative or default file will be used in their place.
2. Using the API create an ivrBrandingProfile which defines the directory above as the resourceLocation. (See the API Reference for details.)
3. Use this ivrBrandingProfile to customize your calls on:
   a. a system level (that is, as part of the global systems profile)
   b. a per-tenant basis (as part of the tenant definition)
   c. a per-IVR basis (as part of an IVR definition)

Note: When the multi brands feature key is present and the IVR branding is applied at more than one level then the lowest level ivrBrandingProfile defined is the one that it used in a call leg. If the single brand feature key is present then only the system level ivrBrandingProfile is used. See the Using Profiles section in the API Reference.

3.2 SIP/Lync Call Message Customization

This section describes how to customize the in-call experience when dialing into a coSpace from a SIP or Lync endpoint. Also see the callBrandingProfile sections in the API Reference.

3.2.1 Audio messages to be customized

The following list is all the audio messages required for Release 1.6 and the associated filenames to use for the recordings.

Text of message	Filename to use
Welcome to Acano	welcome.wav
I haven't been able to connect you. Goodbye.	timeout.wav
Press '1' to join the call.	call_join_confirmation.wav
You are joining the call now.	call_join.wav

Hello. You are invited to an Acano call.	call_outgoing_welcome.wav
Press '1' to enter the coSpace.	cospace_join_confirmation.wav
You are entering the coSpace now.	cospace_join.wav
Hello. You are invited to enter an Acano coSpace.	cospace_outgoing_welcome.wav
Please enter the passcode, followed by the '#'(pound) key.	passcode_entry.wav
That passcode isn't correct. Please try again.	passcode_incorrect_try_again.wav
Please try again: this is your last attempt.	passcode_incorrect_final_attempt.wav
That passcode isn't correct. Goodbye.	passcode_incorrect_goodbye.wav

3.2.2 Recording format for audio messages

Use audio files created with Audacity and saved as a single track PCM16, at either 8 or 16kHz sample rate, 16 bits per sample and mono. The file size for each recording must be less than 400kB.

Note1: We have not tested other audio tools and, if used, they may cause problems.

Note2: It is not necessary to include any additional periods of silence at the start or end of these prompts

3.2.3 Background image properties

The background file must be in .jpg format, less than 500kB in size and a maximum of 1920 pixels wide and 1200 pixels high. Images will be centered, scaled and padded to preserve their aspect ratio. Progressive JPEG is not supported.

Image use	Filename to use
Call logo	background.jpg

3.2.4 Customization procedure

The following steps provide an overview of the customization procedure, for a detailed procedure refer to chapter 4.

1. On the web server create a directory for the customization files and place all the files listed in the section above into it. Do not zip these files.

   Acano has created an archive with their audio and video files. These can be individually used when a mix of custom and default files are required. The necessary files must be copied into the directory.

   If any file is missing then no alternative or default file will be used in its place.
2. Using the API create a callBrandingProfile which defines the directory above as the resourceLocation. (See the API Reference for details.)
3. Use this callBrandingProfile to customize your SIP/Lync calls on:
   a. a system level (that is, as part of the global systems profile)
   b. a per-tenant basis (as part of the tenant definition)

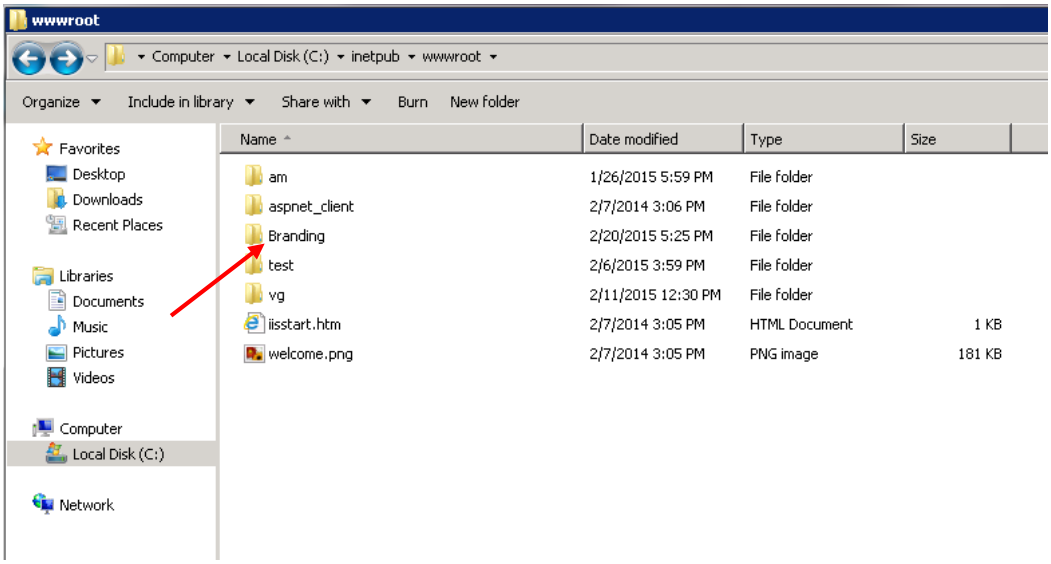
c. a per-coSpace basis (as part of the coSpace definition)

Note: When the multi brands feature key is present and call branding is applied at more than one level, then the lowest level callBrandingProfile defined is the one that it used in a call leg. If the single brand feature key is present then only the system level callBrandingProfile is used. See the Using Profiles section in the API Reference.

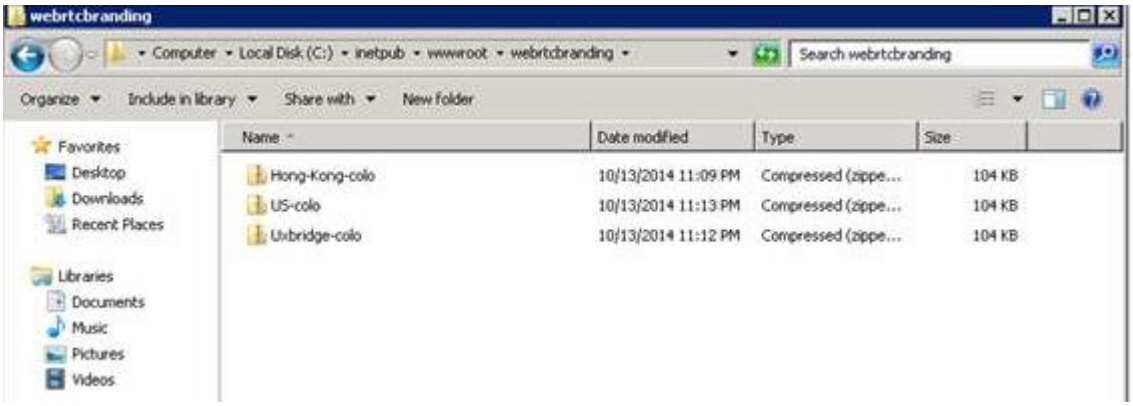
4 Detailed Customization Procedure Using Postman

This section provides a step by step example of call branding using Microsoft Windows. It assumes that Microsoft Internet Information Services (IIS) Manager is installed with the latest patches on the web server that will host your call branding files.

1. On the web server create a directory under the default IIS Manager location c:\inetpub\wwwroot. In the example below, the folder is called Branding.

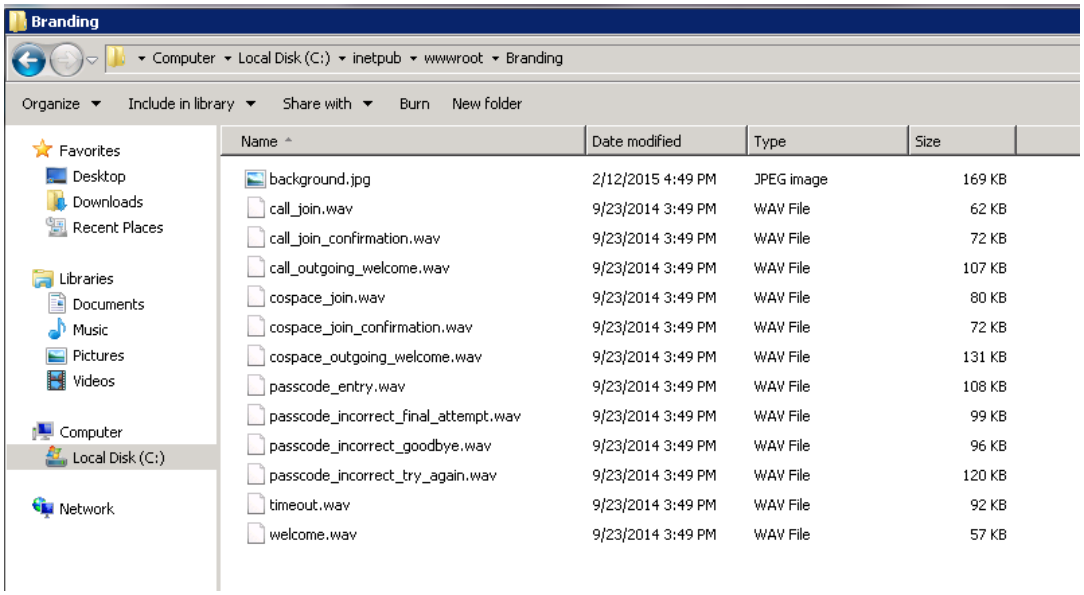


2. Place all the files appropriate to the level of branding you intend to do into the folder created in step 1.
   a. For WebRTC Client customization these will be the files from section 2.1.



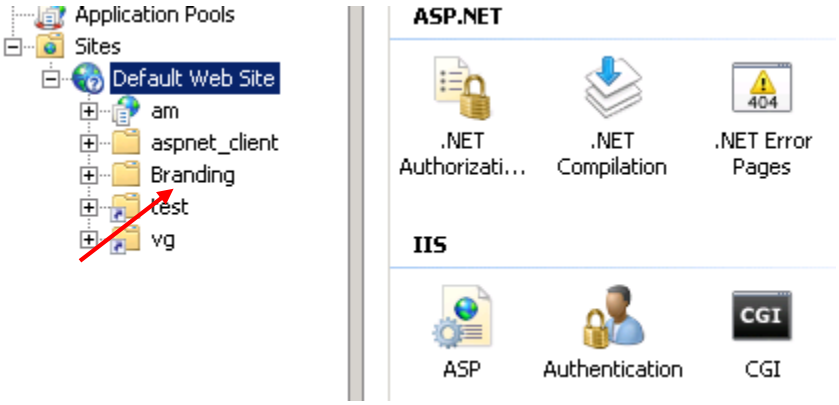
Note: in the above screenshot the WebRTC Client customization files are zipped together by location

b. For call customization these will be the files from sections 3.1 and 3.2.


Branding
Computer ▸ Local Disk (C:) ▸ inetpub ▸ wwwroot ▸ Branding
Organize
Include in library
Share with
Burn
New folder
Favorites
Desktop
Downloads
Recent Places
Libraries
Documents
Music
Pictures
Videos
Computer
Local Disk (C:)
Network
Name
Date modified
Type
Size
background.jpg 2/12/2015 4:49 PM JPEG image 169 KB
call_join.wav 9/23/2014 3:49 PM WAV File 62 KB
call_join_confirmation.wav 9/23/2014 3:49 PM WAV File 72 KB
call_outgoing_welcome.wav 9/23/2014 3:49 PM WAV File 107 KB
cospace_join.wav 9/23/2014 3:49 PM WAV File 80 KB
cospace_join_confirmation.wav 9/23/2014 3:49 PM WAV File 72 KB
cospace_outgoing_welcome.wav 9/23/2014 3:49 PM WAV File 131 KB
passcode_entry.wav 9/23/2014 3:49 PM WAV File 108 KB
passcode_incorrect_final_attempt.wav 9/23/2014 3:49 PM WAV File 99 KB
passcode_incorrect_goodbye.wav 9/23/2014 3:49 PM WAV File 96 KB
passcode_incorrect_try_again.wav 9/23/2014 3:49 PM WAV File 120 KB
timeout.wav 9/23/2014 3:49 PM WAV File 92 KB
welcome.wav 9/23/2014 3:49 PM WAV File 57 KB

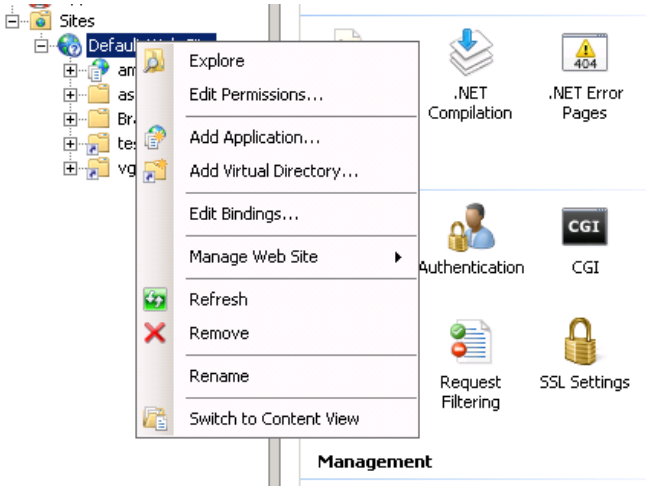
Note: the files for call customization are not zipped together.

3. Open IIS Manager and expand the Default Web Site. The newly created folder should show within the list. If it does, jump to step 6.

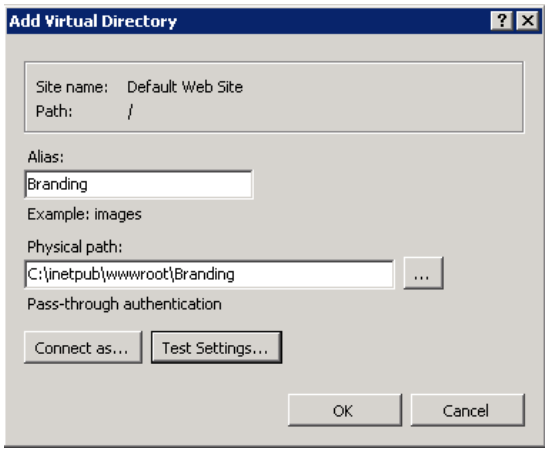


If the newly created folder does not show within the list or your folder is outside of the standard IIS Manager location, you will need to create a new Virtual Directory, go to step 4.

4. Right Click on Default Web Site and select Add Virtual Directory.



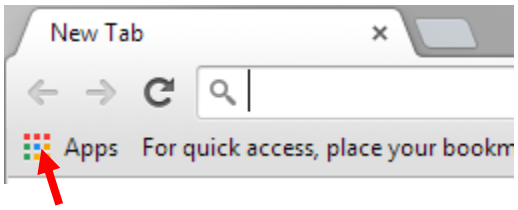
5. Define the name (in this case Branding) you will use to access this area and the folder path that will hold the files. Once created, access will be the Web Site URL with /Branding at the end.



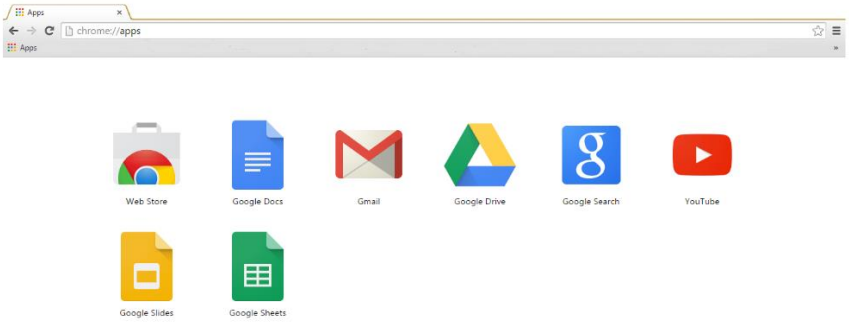
6. Verify the web service is working. Open a browser and enter the full URL including the file name to see if the file opens. Here it is showing the background picture using the background.jpg image.

The remainder of this chapter covers using the Chrome tool Postman, to create and apply a callBrandingProfile. Appendix A details these same steps using the Firefox tool Poster, and the Chrome Advanced Rest Client.

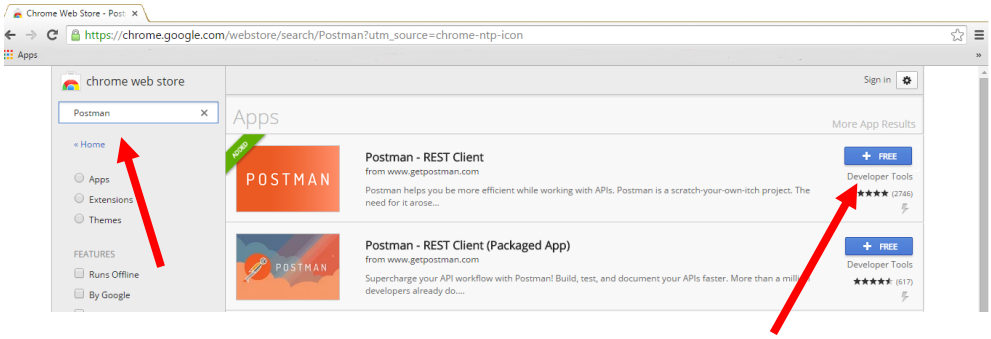
7. Install Postman into Chrome (if not already installed) by opening the Apps button in the upper left corner. If Postman is already installed go to step 12.



8. Click on Web Store to open the Chrome App Store

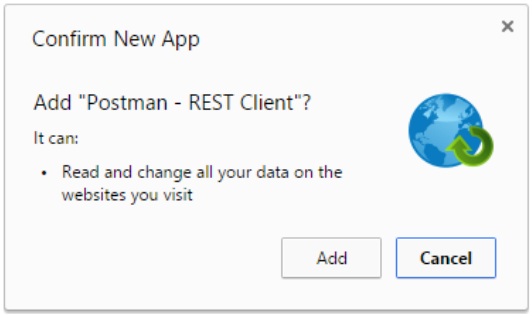


9. Enter **Postman** in the Search field and press **Enter**.

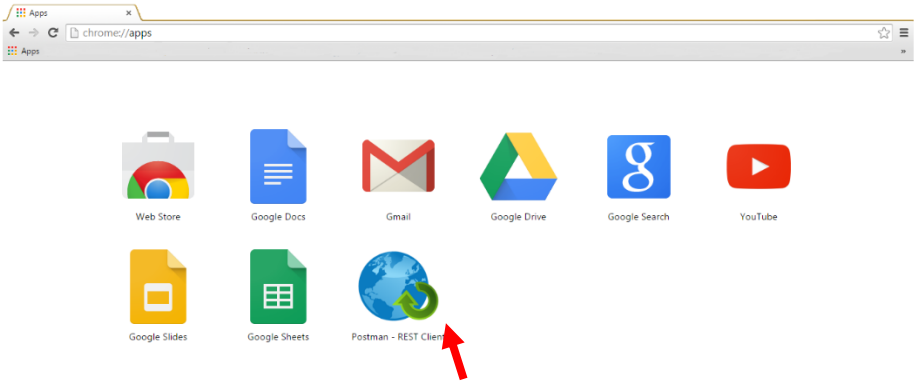


10. Install Postman – REST Client by clicking on the + FREE button to the right

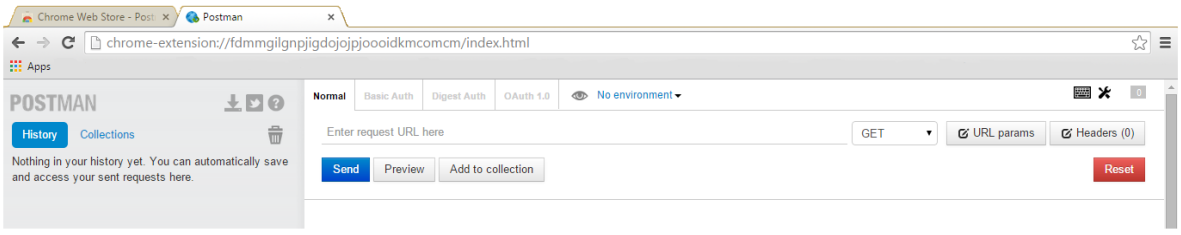
11. Click **Add** to continue with the installation



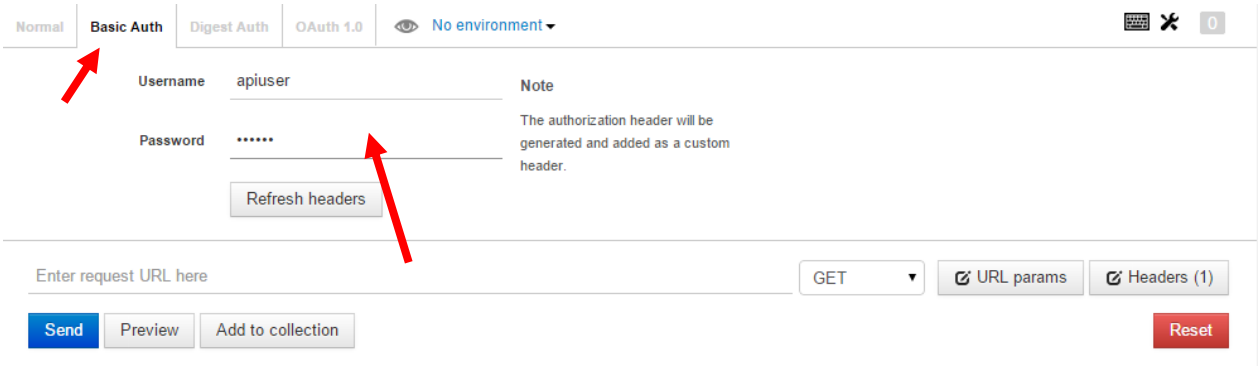
Once installed, Postman – REST Client will appear on the Apps page



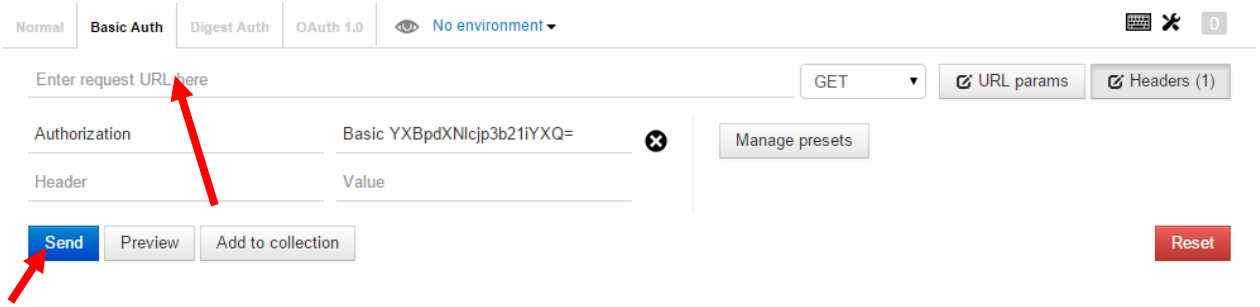
12. Open Postman by clicking on the Icon from within the Apps page of Chrome



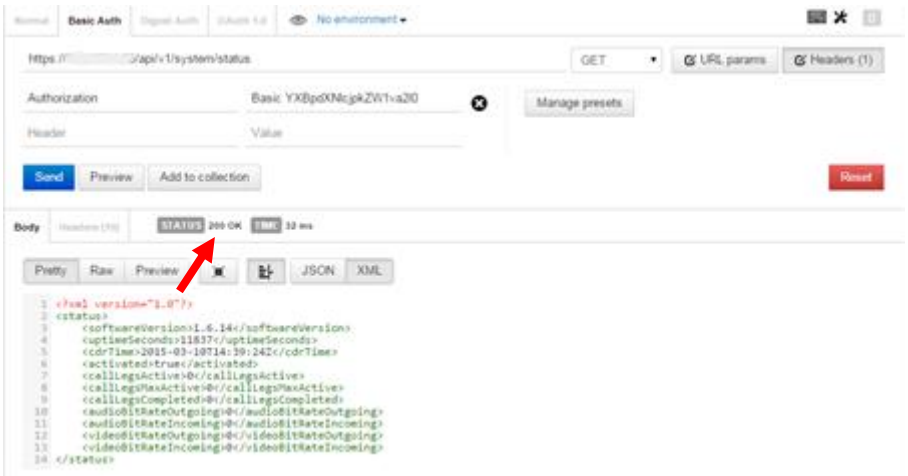
13. Select the **Basic Auth** tab and enter the Username and Password for the API of the Acano Server. Click **Refresh headers**.



14. To verify API connectivity is working, enter the URL of the Acano server and press **SEND**.

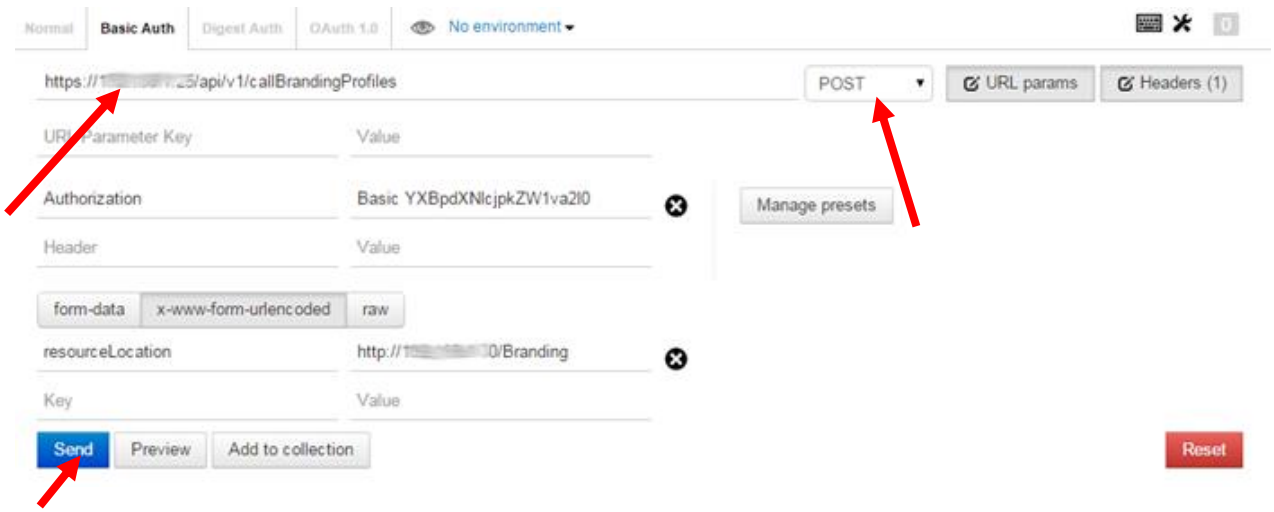


A 200OK Response should be returned with the Status Data, for example:

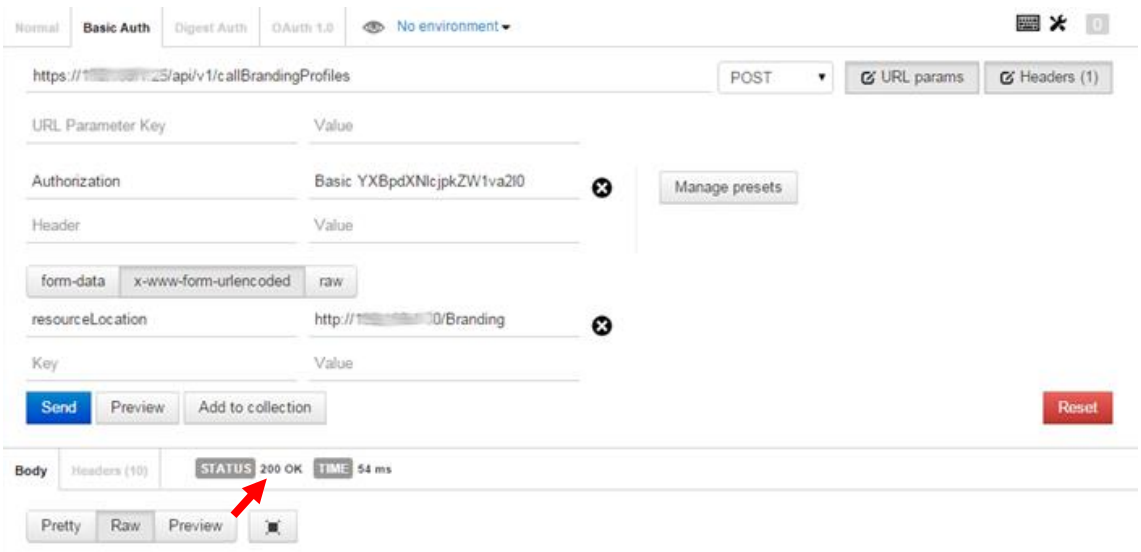


If it fails, verify that the login is correct and that you can access the Web URL from this PC.

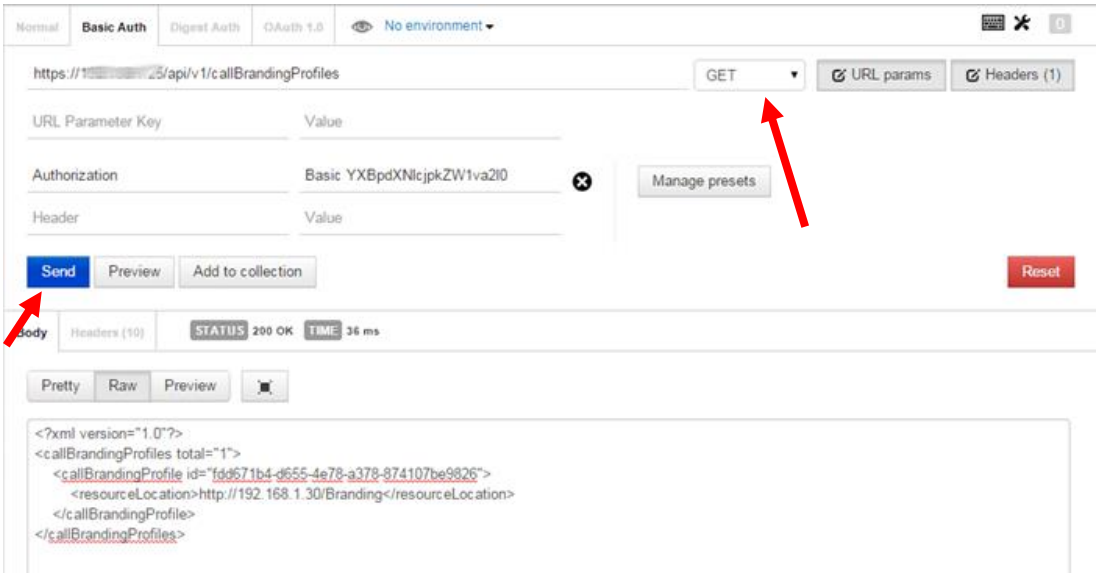
15. Once connectivity is verified, define the Call Branding Profile by specifying the URL where the Branding files are located. Make sure that you set the request type to **POST**. Press **Send** to submit the data.



A 200OK Response should be returned, for example:

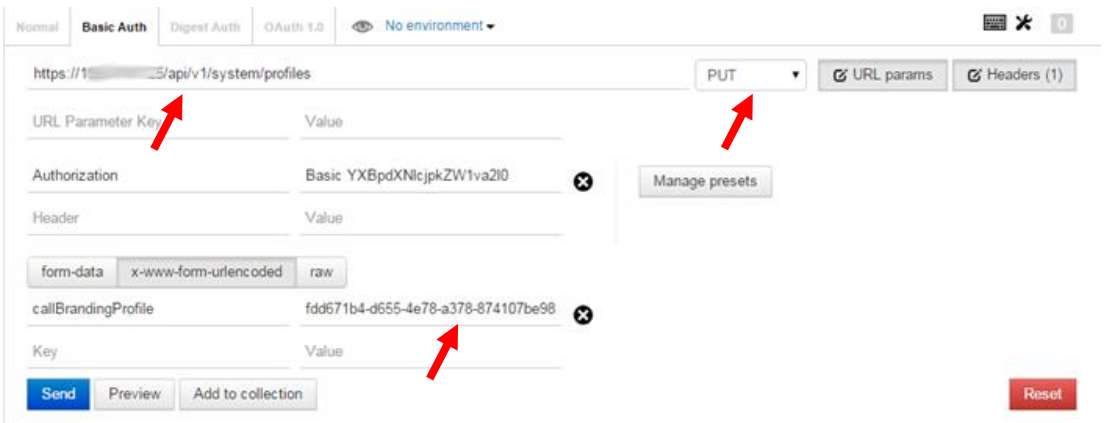


16. Change the request type back to **GET**, and press **Send**. The response should look like this:



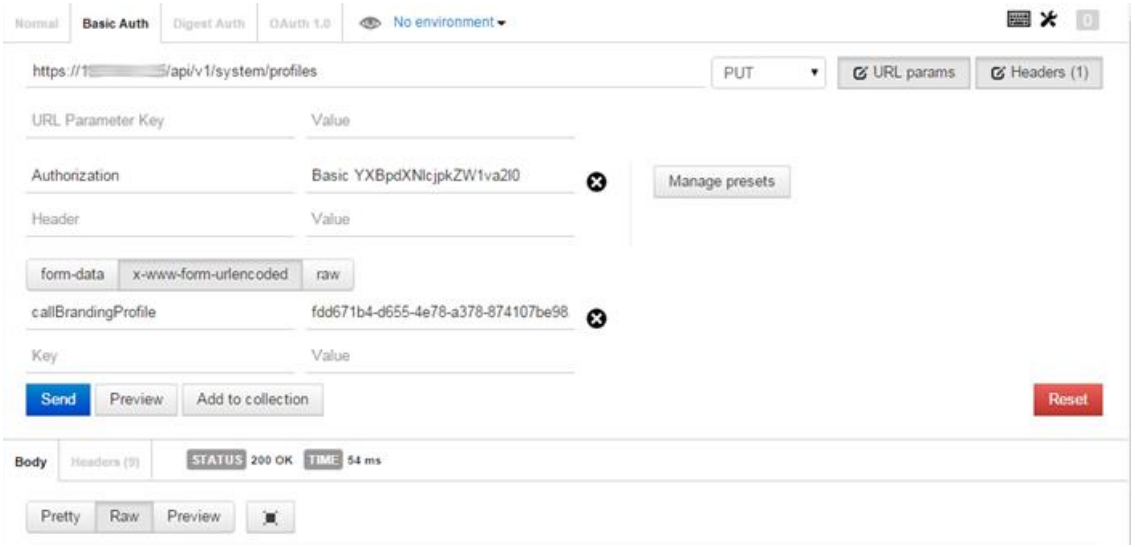
17. Make a note of the ID number listed next to “callBrandingProfile id=”, in this example it is fdd671b4-d655-4e78-a378-874107be9826

18. Assign this ID to the Call Branding Profile to be used (see note below)
    a. enter the URL of the Acano Server
    b. enter the id from step 17 into the callBrandingProfile field
    c. change the request type to **PUT**

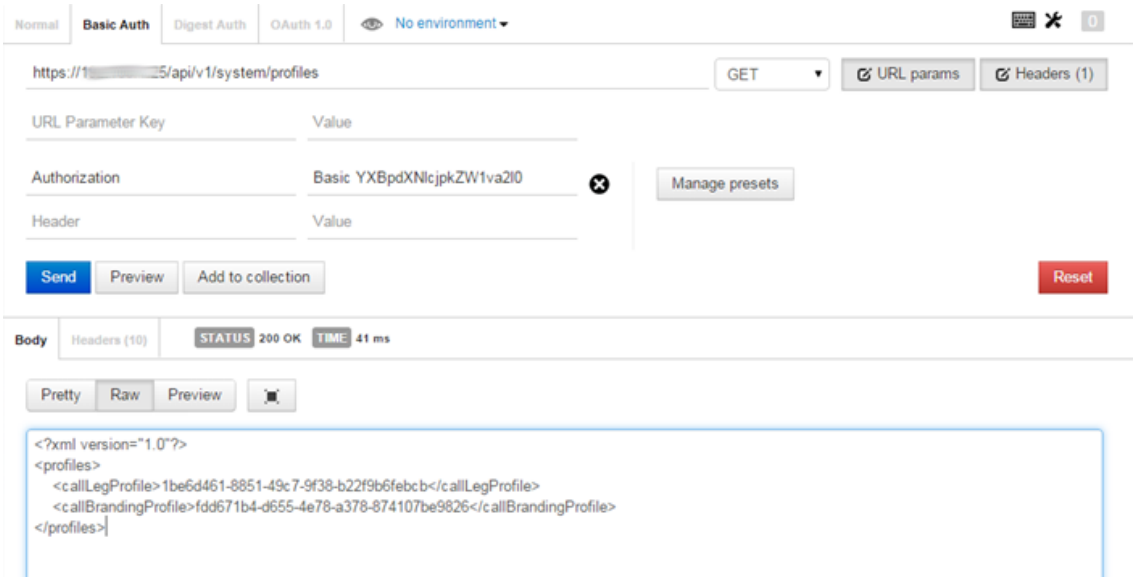


Note: depending on your branding license level, you can apply the callBrandingProfile to:
- the system level (that is, as part of the global systems profile),
- a per-tenant basis (as part of the tenant definition),
- a per-coSpace basis (as part of the coSpace definition).

19. Press **Send**, and you should get another 200OK Response like this:



20. To verify the data has been set correctly, simply change the request type to **GET** using the same URL as the previous PUT. Press **Send**.



21. That is it, your Branding files should now be used for calls, providing you have installed the Branding License key on your server. Place a call from a SIP endpoint to a coSpace. Make sure the call displays the background picture, and that the voice prompt is audible.

Video
00:00:58 acanouser1.cospace@acanodemo.com sip:acanouser1.cospace@acanodemo....
END

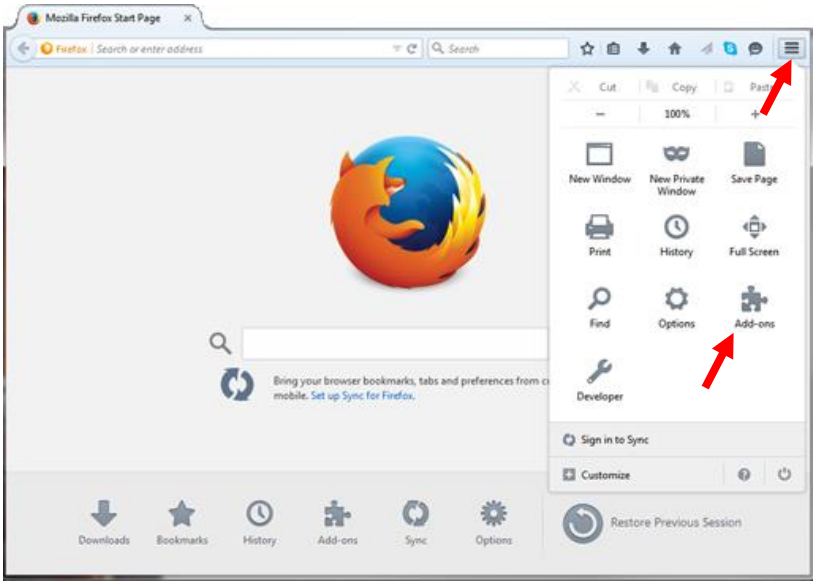
Appendix A Using Other Popular API Tools

This appendix covers using Firefox Poster and the Chrome Advanced Rest Client, to create and apply a callBrandingProfile.

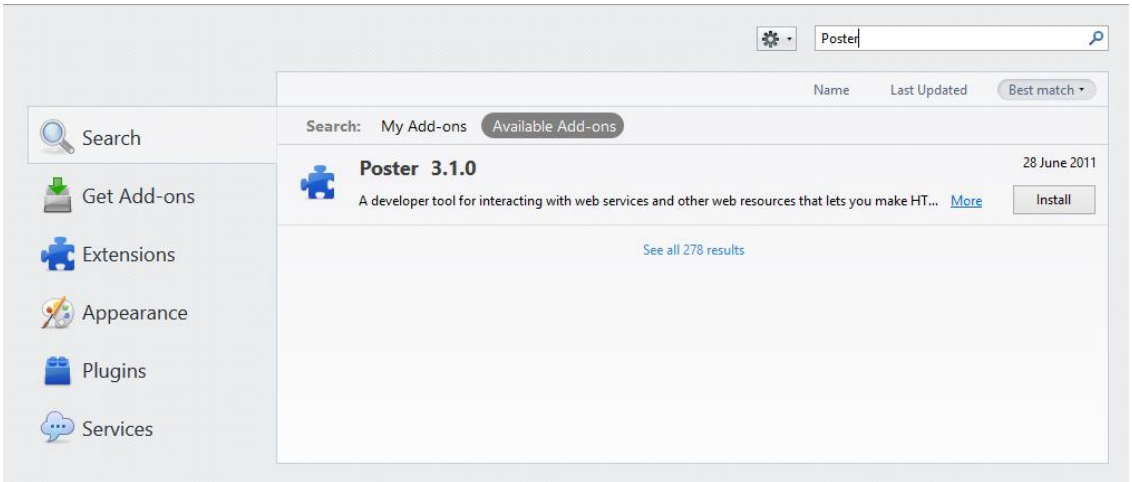
Using Firefox Poster

Follow steps 1 to 6 in Chapter 4 before proceeding with these steps.

7. Install Poster into Firefox (if not already installed) by opening the Menu button in the upper right corner and choosing Add-ons. If Poster is already installed go to step 11 .



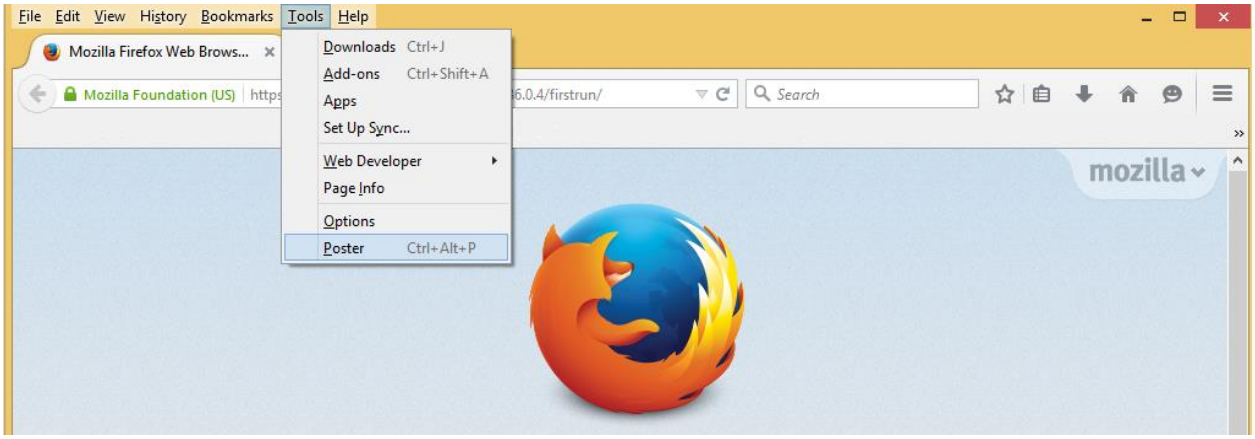
8. Enter **Poster** in the Search field and press **Enter**.



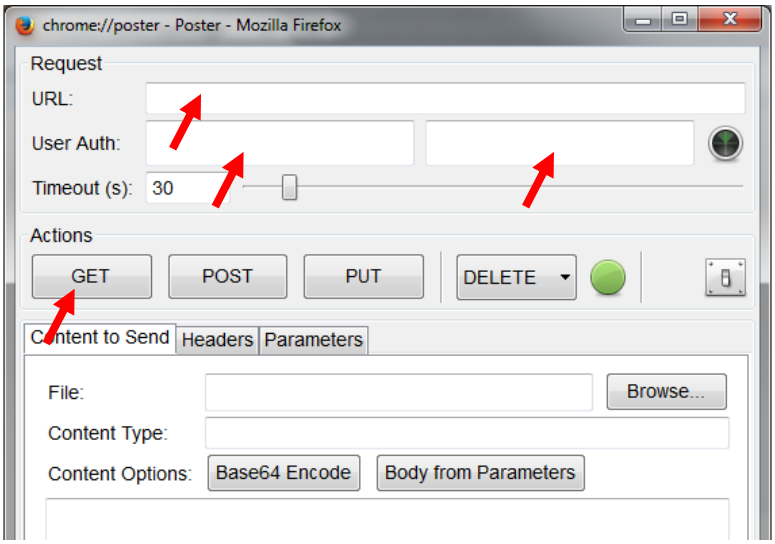
9. Click **Install** and follow directions to restart Firefox once complete.

10. Enable the Menu Bar by right clicking just to the right of the + sign that opens a new tab and selecting Menu Bar.

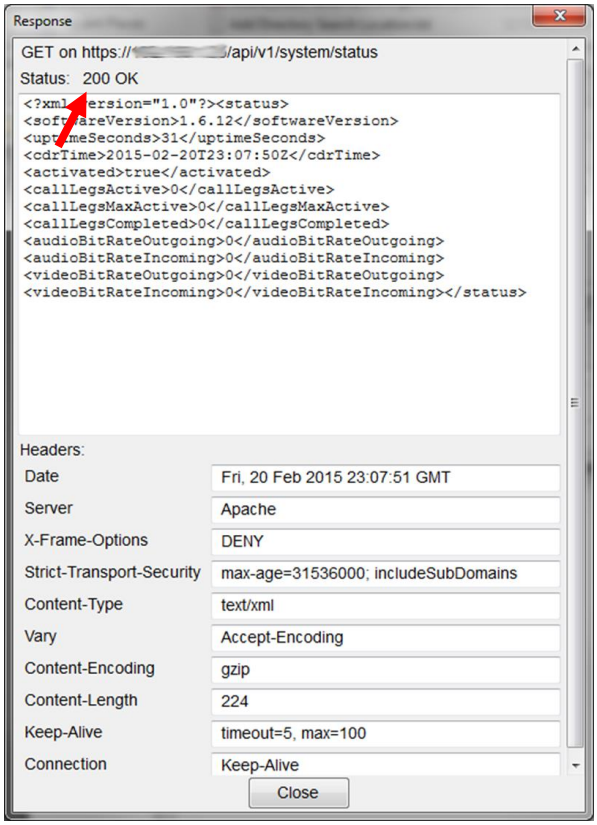
11. Once enabled, access Poster through Tools > Poster



12. To verify that API connectivity is working, enter the URL of the Acano server, and the Username and Password for the API. Press **GET**.



A 200OK Response should be returned with the Status Data, for example:

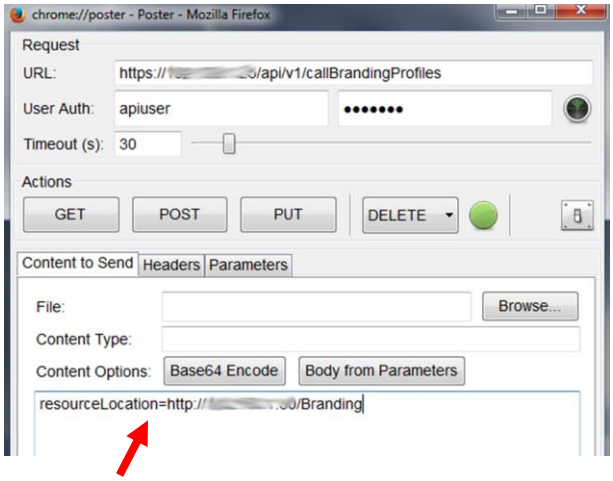


If the GET fails, verify that:

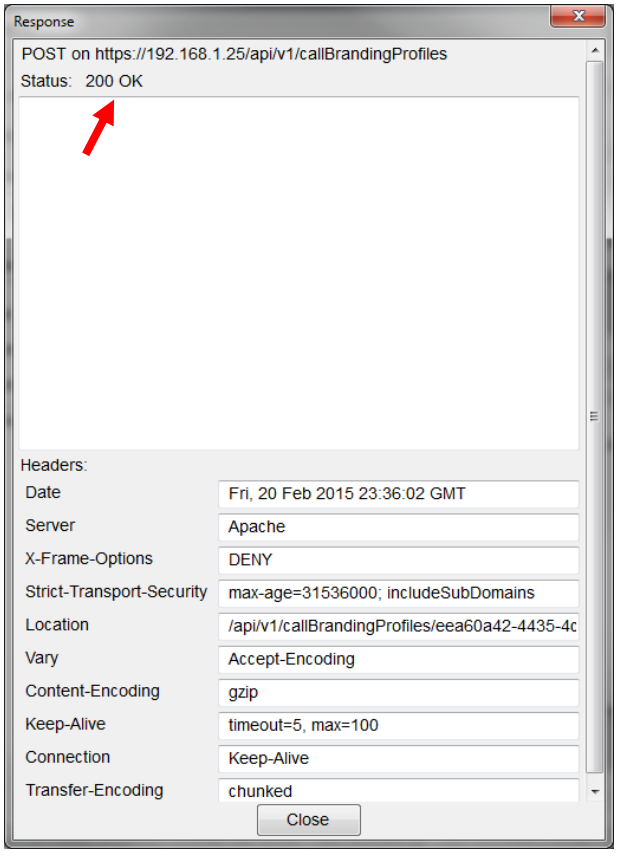
- the login is correct,
- you can access the Web URL from this PC
- Firefox trusts the certificate assigned to Web Admin, or make a Permanent exception by adding this Trust to the browser's Trust store. Do this by opening a standard browser session to Web Admin using Firefox, and accept the warnings and add the exception.

13. Once connectivity is verified, define the Call Branding Profile as below defining the URL where the Branding files are located.

    For example: resourceLocation=https<url of branding files>

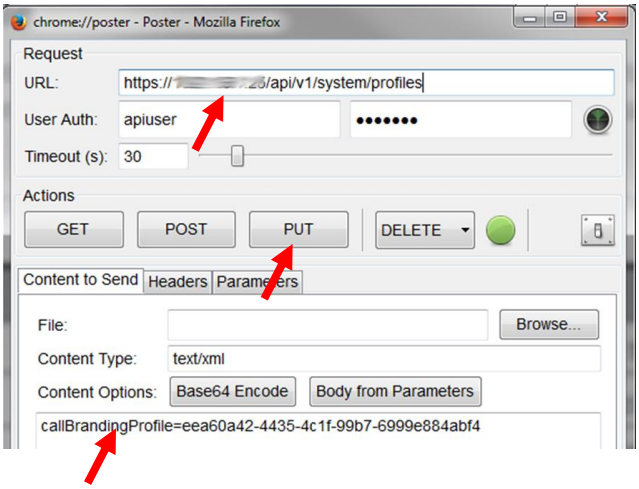


14. Press **POST** to submit the data, you should get a 200OK Response like this:



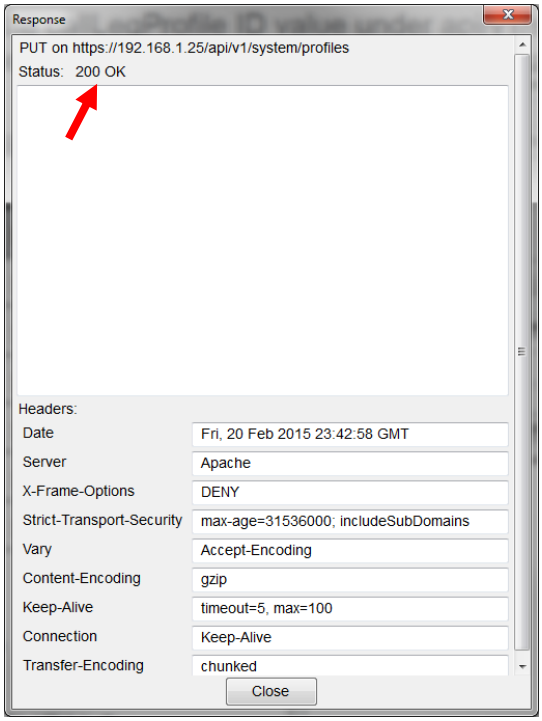
15. Make a note of the Location field in this response and record the ID number shown, it is the long number after the /callBrandingProfiles/ text. In the example above, the ID is eea60a42-4435-4c1f-99b7-6999e884abf4.

16. Assign this ID to the Call Branding Profile to be used (see note below):
    a. enter the URL of the Acano Server
    b. enter the id from step 15 into the callBrandingProfile. For example: callBrandingProfile= eea60a42-4435-4c1f-99b7-6999e884abf4
    c. change the request type to **PUT**

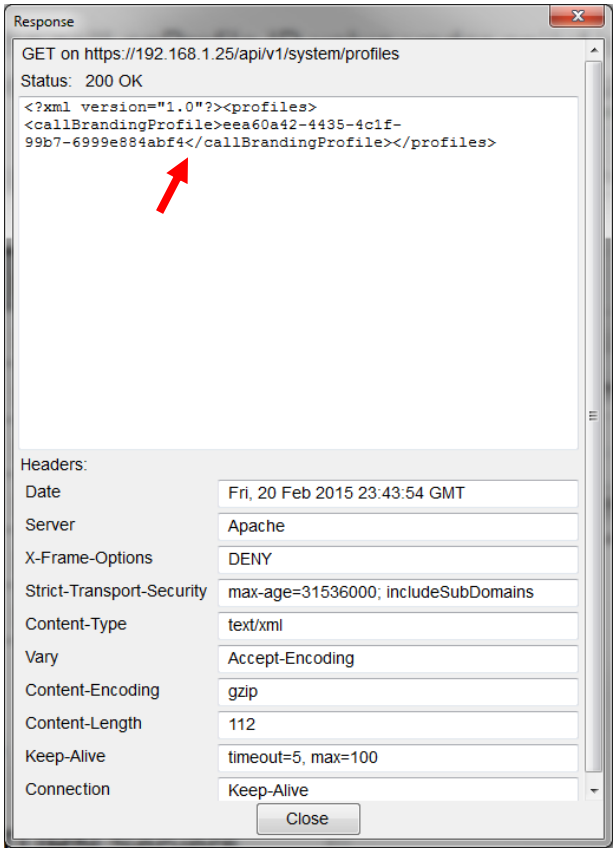


Note: depending on your branding license level, you can apply the callBrandingProfile to:
- the system level (that is, as part of the global systems profile),
- a per-tenant basis (as part of the tenant definition),
- a per-coSpace basis (as part of the coSpace definition).

You should receive another 200OK Response like this:



17. To verify the data has been set correctly, simply press **GET** using the same URL as the previous PUT and it should return the settings as such:

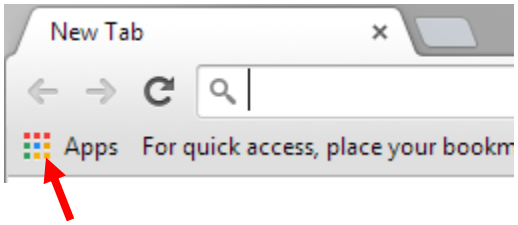


18. That is it, your Branding files should now be used for calls, providing you have installed the Branding License key on your server. Place a call from a SIP endpoint to a coSpace. Make sure the call displays the background picture, and that the voice prompt is audible.

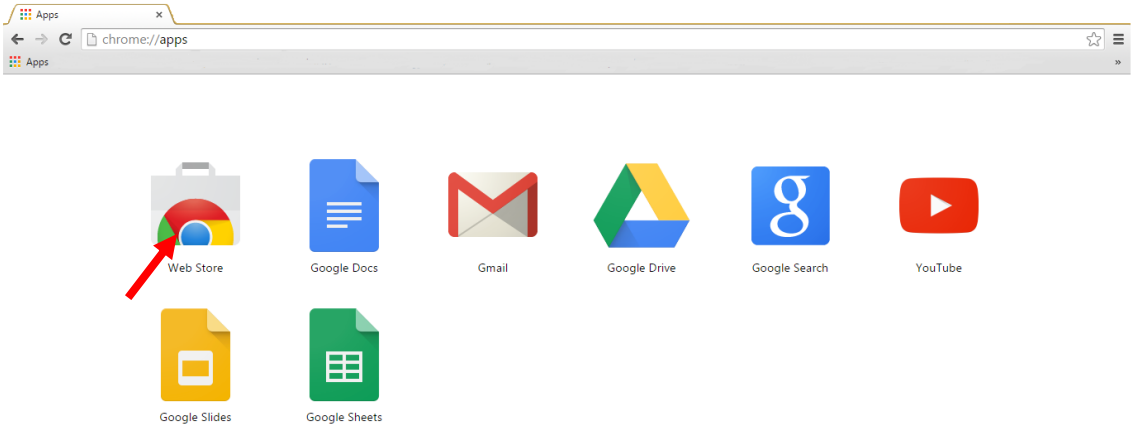
Using Chrome Advanced Rest Client

Follow steps 1 to 6 in Chapter 4 before proceeding with these steps.

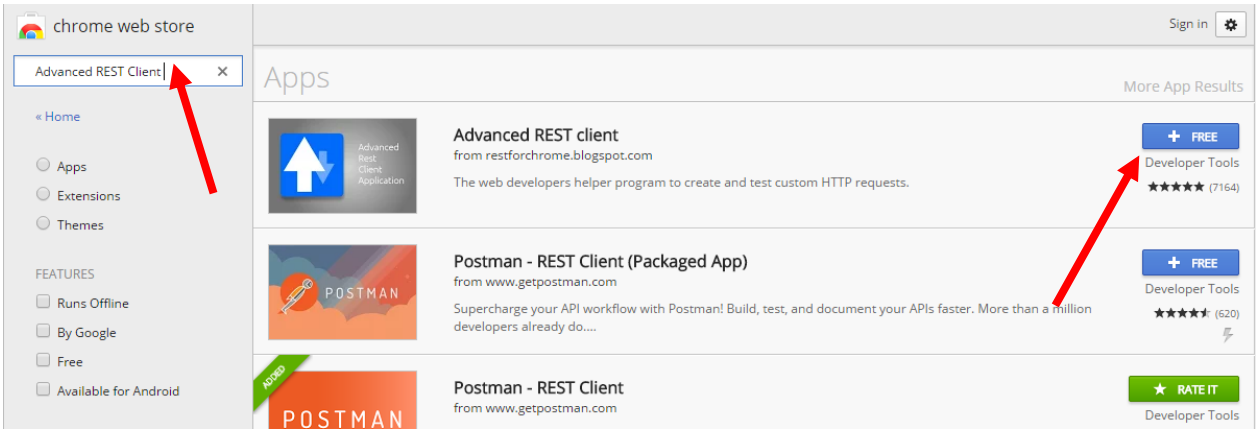
7. Install the Advanced REST Client into Chrome (if not already installed) by opening the Apps button in the upper left corner. If Advanced REST Client is already installed go to step 12.



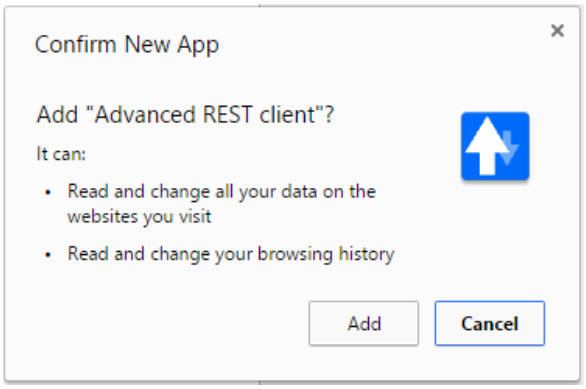
8. Click on Web Store to open the Chrome App Store



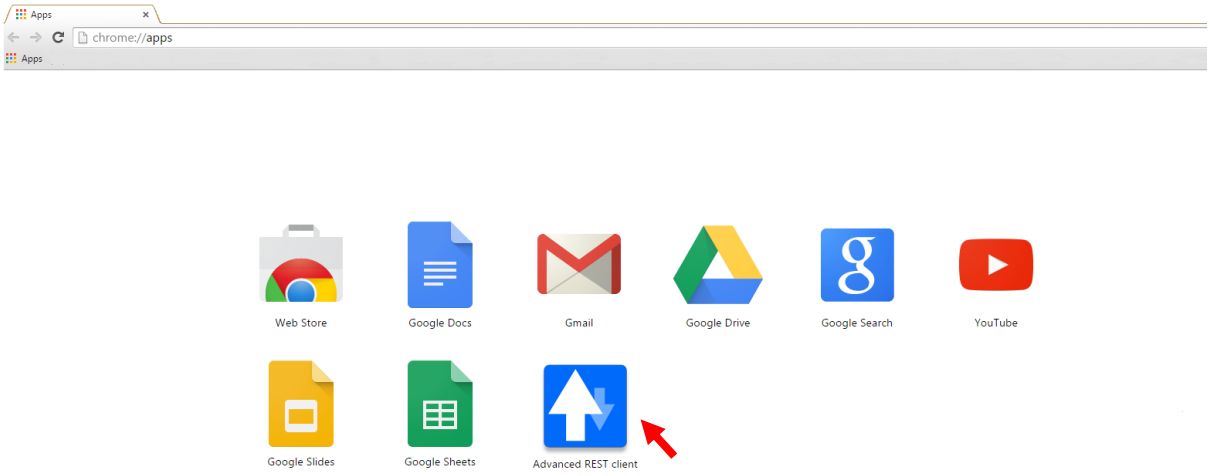
9. Enter Advanced REST Client in the Search field and press **Enter**. Install Advanced REST Client by clicking on the **+ FREE** button to the right.



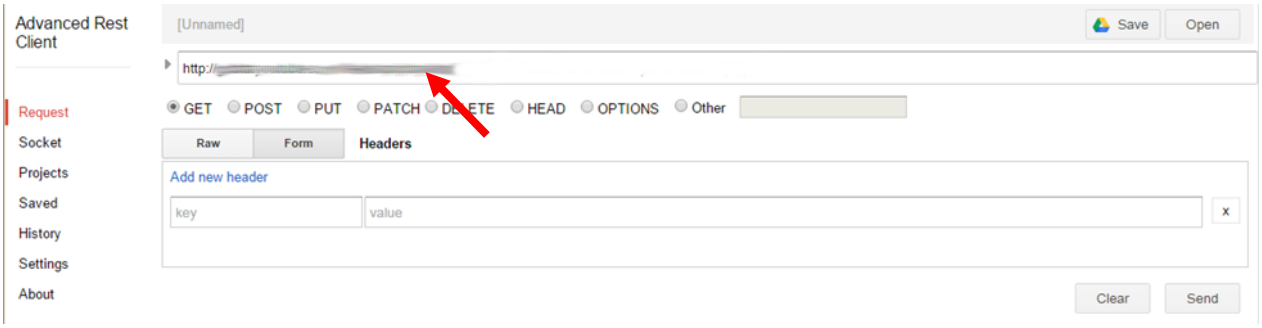
10. Click **Add** to continue with the installation


Confirm New App
Add "Advanced REST client"?
It can:
Read and change all your data on the websites you visit
Read and change your browsing history
Add
Cancel

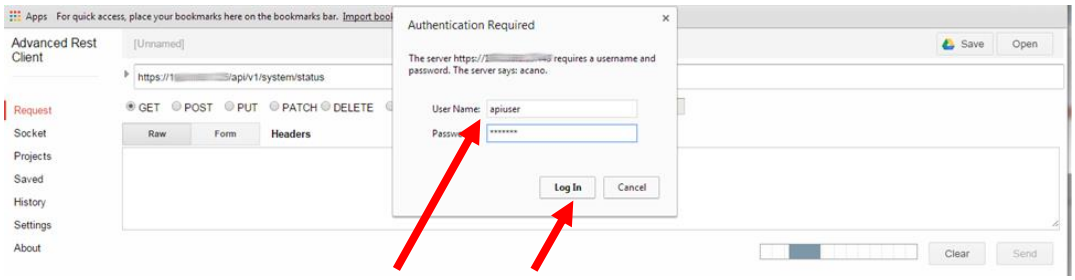
11. Once installed, the Advanced REST Client will appear on the Apps page



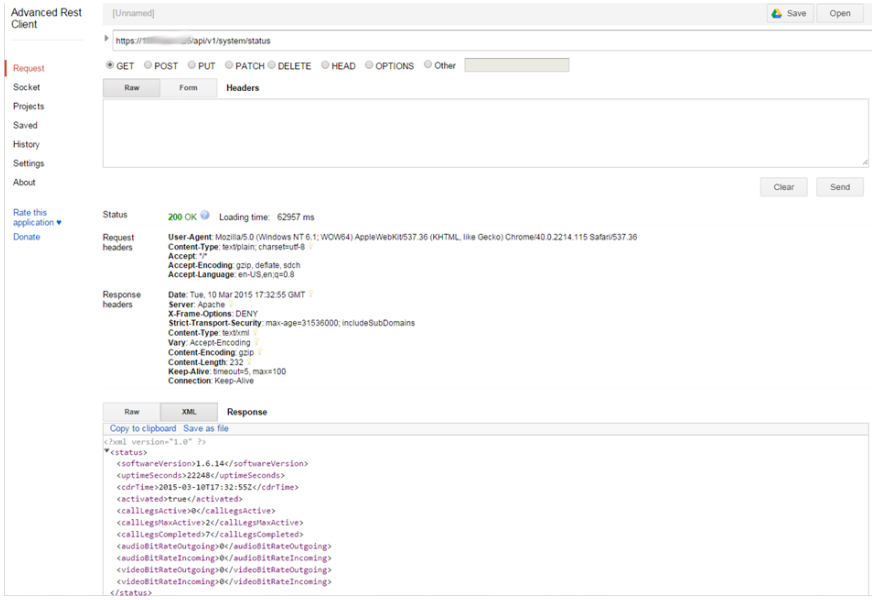
12. Open the Advanced REST Client by clicking on the Icon from within the Apps page of Chrome. To verify API connectivity is working, enter the URL of the Acano server and press **SEND**.



13. Enter the API login when prompted and press Log In.

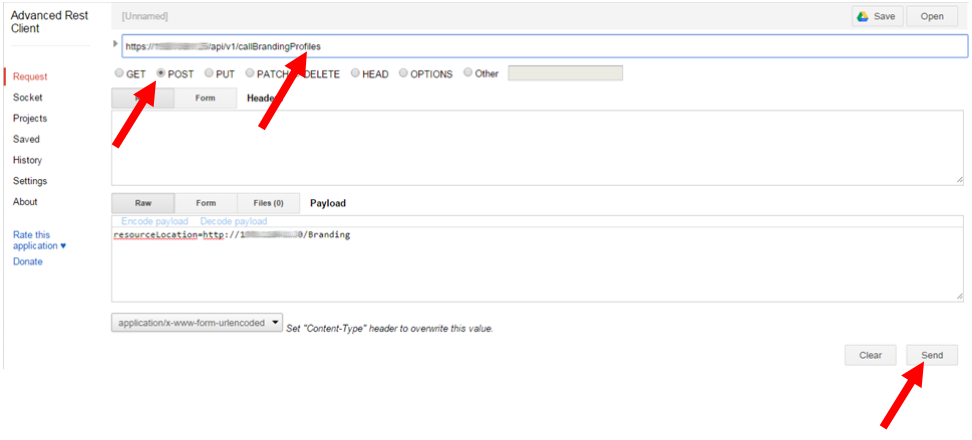


A 200OK Response should be returned with the Status Data, for example:

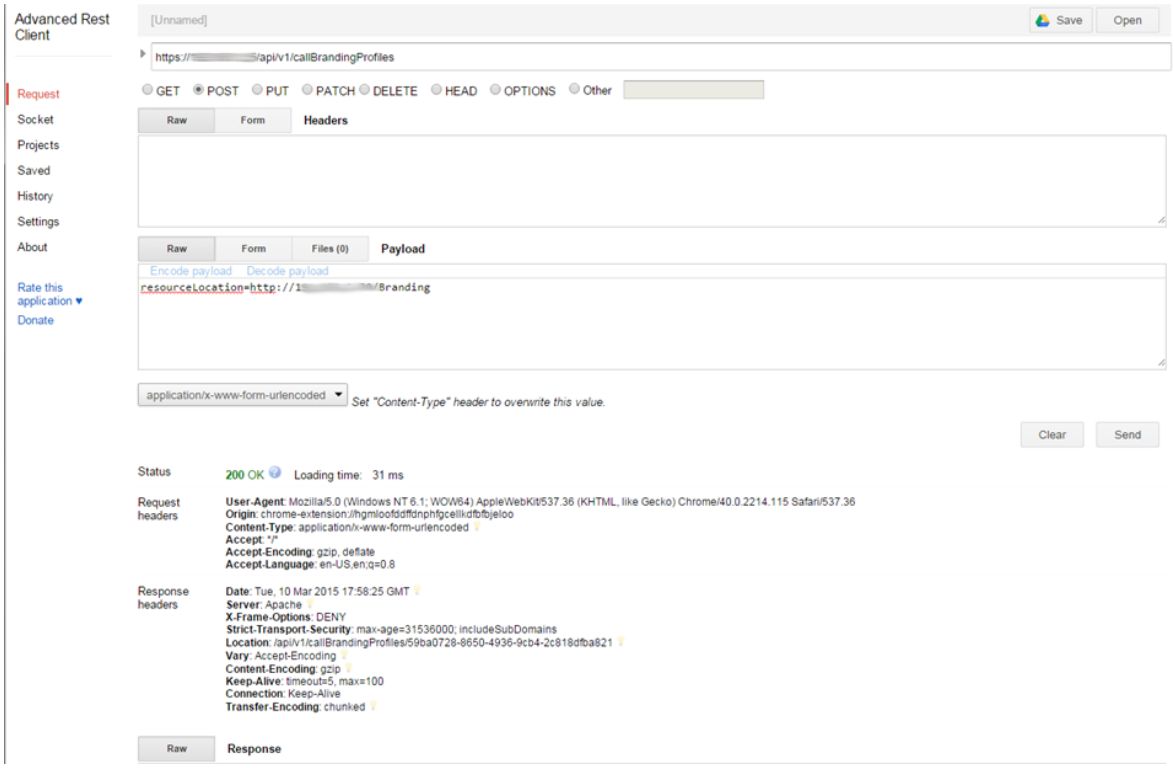


If it fails, verify that the login is correct and that you can access the Web URL from this PC.

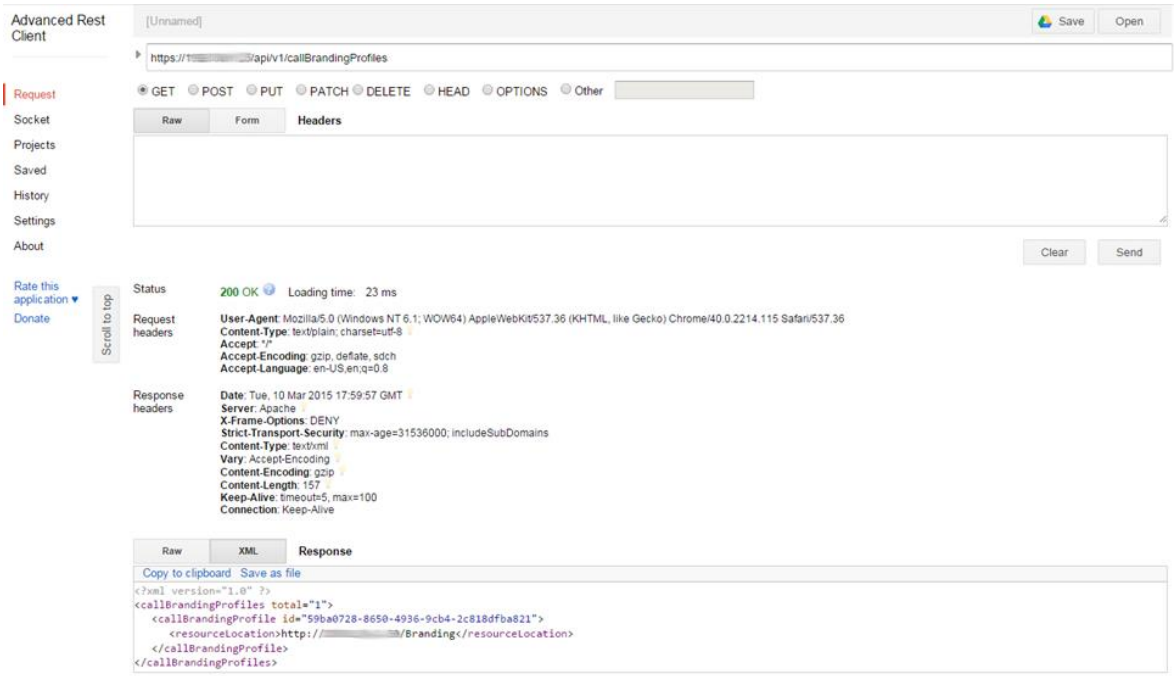
14. Once connectivity is verified, define the Call Branding Profile by specifying the URL where the Branding files are located. Make sure that you set the request type to **POST**. Press **Send** to submit the data.



A 200OK Response should be returned, for example:

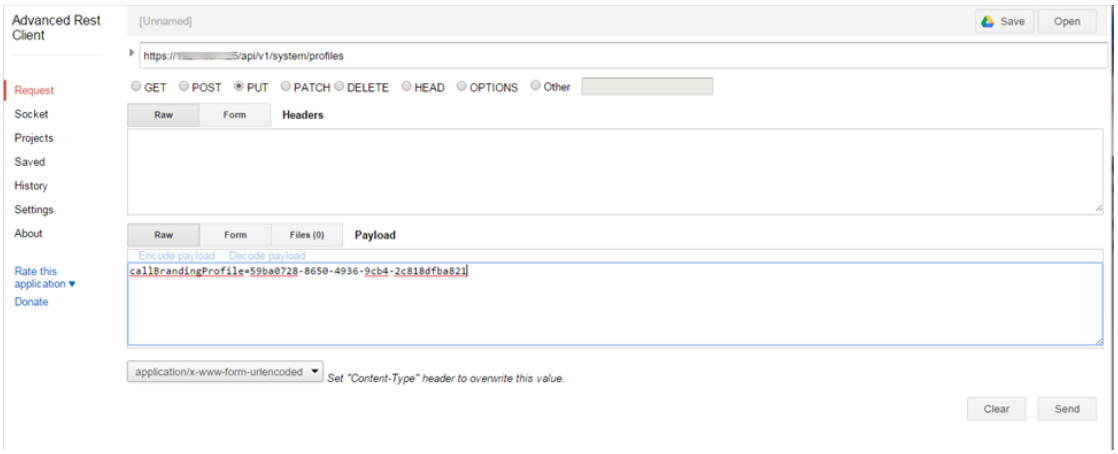


15. Change the request type back to **GET**, and press **Send**. The response should look like this:



16. Make a note of the ID number listed next to “callBrandingProfile id=”, in this example it is it is 59ba0728-8650-4936-9cb4-2c818dfba821

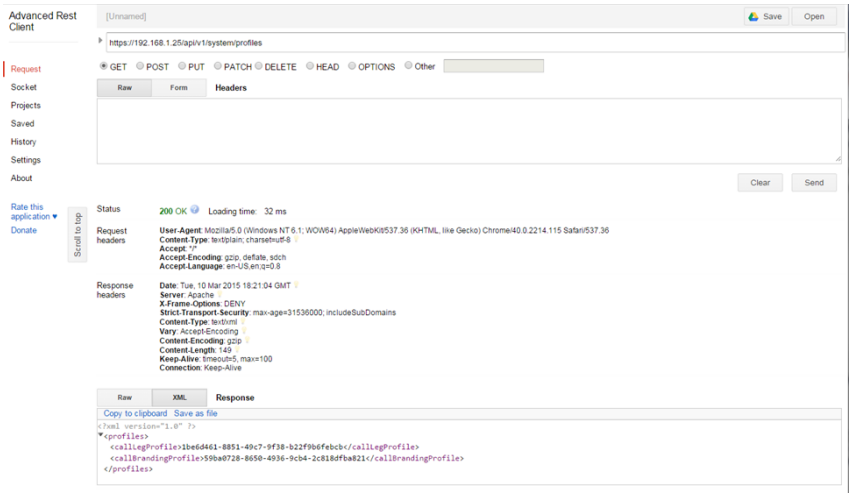
17. Assign this ID to the Call Branding Profile to be used (see note below)
    a. enter the URL of the Acano Server
    b. enter the id from step 16 into the callBrandingProfile field
    c. change the request type to **PUT**



Note: depending on your branding license level, you can apply the callBrandingProfile to:
- the system level (that is, as part of the global systems profile),
- a per-tenant basis (as part of the tenant definition),
- a per-coSpace basis (as part of the coSpace definition).

You should receive another 200OK Response like this:

18. To verify it has been set correctly, simply change the request type to **GET** using the same URL as the previous PUT. Press **Send**.



19. That is it, your Branding files should now be used for calls, providing you have installed the Branding License key on your server. Place a call from a SIP endpoint to a coSpace. Make sure the call displays the background picture, and that the voice prompt is audible.

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